

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P959988

Luminaire Tested: **NAV-SB1B-830-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959988
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-830-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

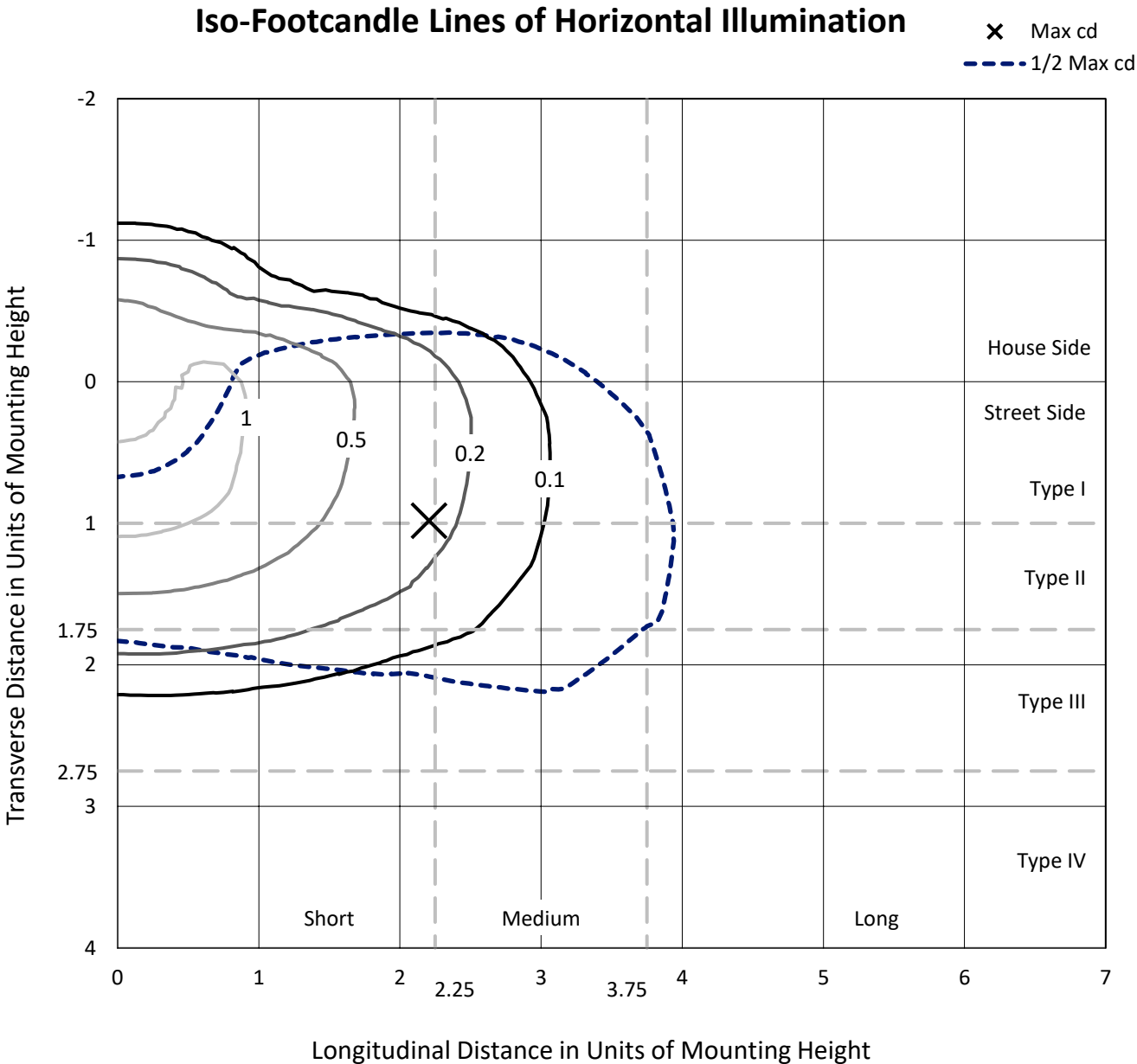
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5191.6 lumens
Efficiency: N/A
Efficacy: 130.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



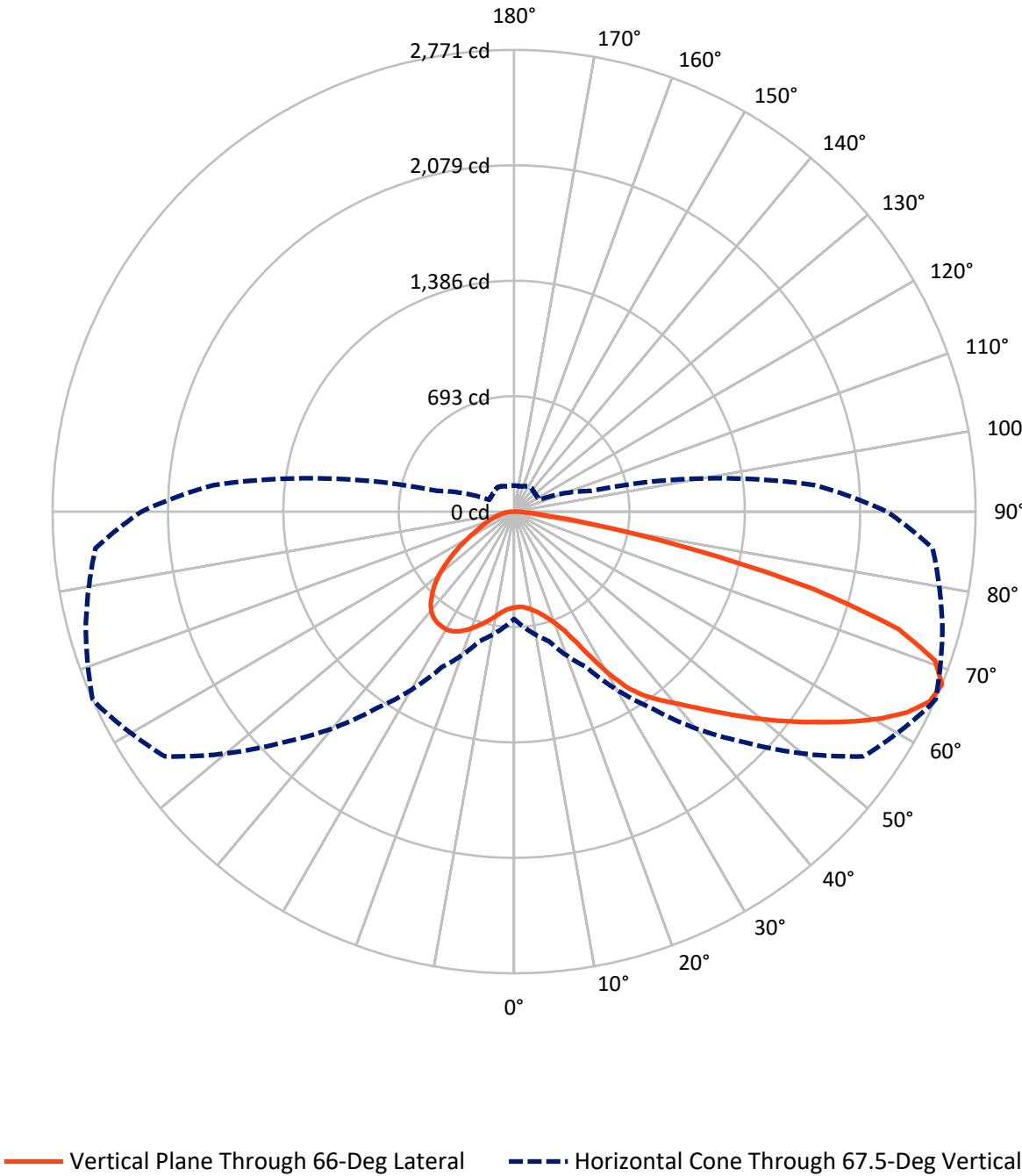
REPORT NUMBER: P959988
CATALOG NUMBER: NAV-SB1B-830-U-T3



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
Type III - Short - N/A

REPORT NUMBER: P959988
CATALOG NUMBER: NAV-SB1B-830-U-T3

Luminous Intensity Polar Plot



REPORT NUMBER: P959988

CATALOG NUMBER: NAV-SB1B-830-U-T3

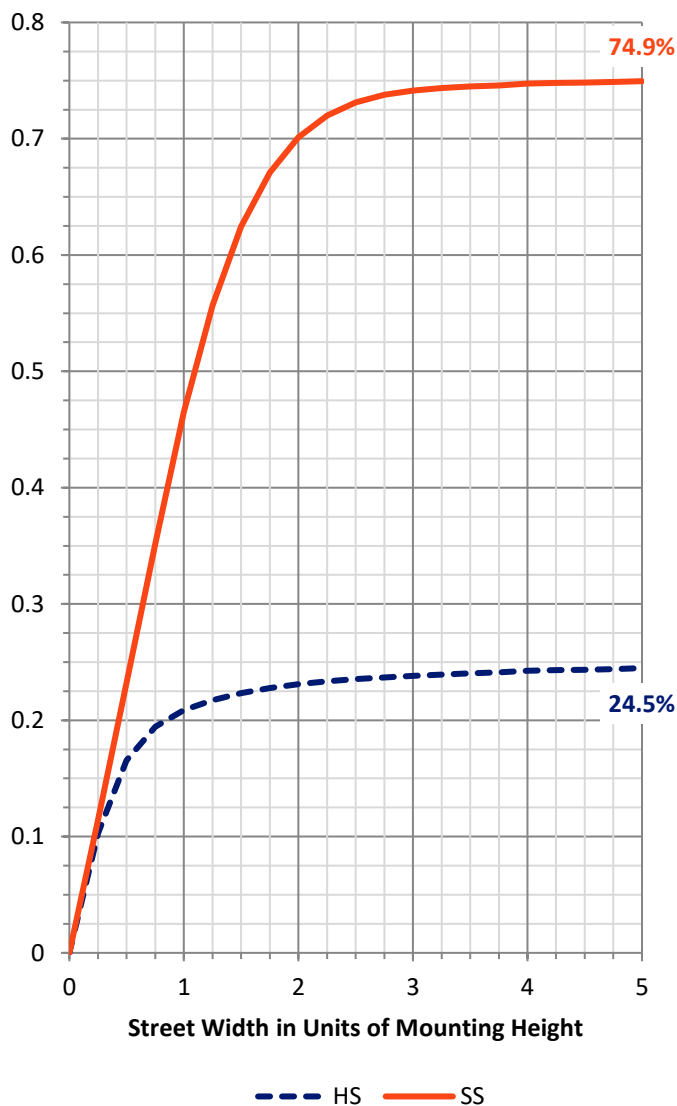
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1290.9	0.0	1290.9
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	3900.7	0.0	3900.7
	% Fixture	75.1	0.0	75.1
Total	Lumens	5191.6	0.0	5191.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.1	1.1
10°-20°	188.6	3.6
20°-30°	363.6	7.0
30°-40°	637.4	12.3
40°-50°	947.7	18.3
50°-60°	1201.3	23.1
60°-70°	1175.4	22.6
70°-80°	560.7	10.8
80°-90°	59.9	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	5191.6	100.0
0°-180°	5191.6	100.0

Coefficient of Utilization



REPORT NUMBER: P959988

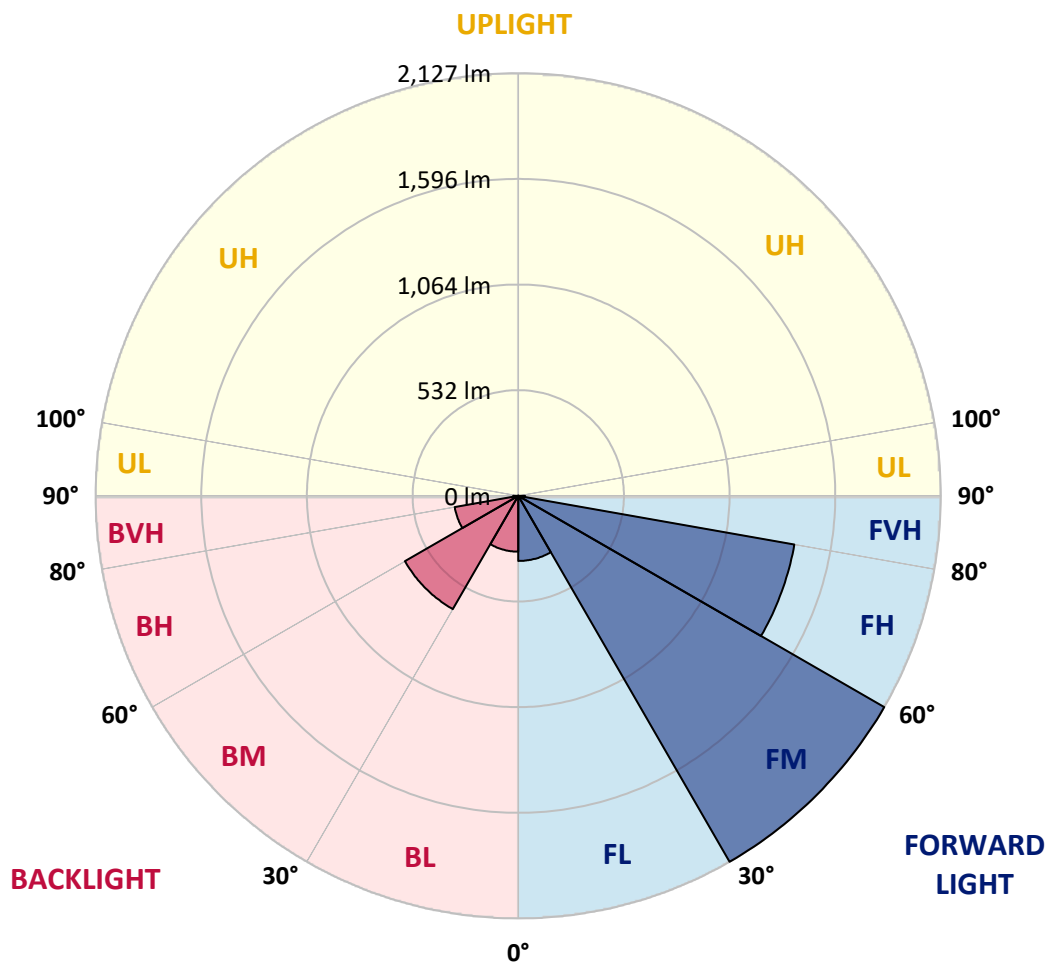
CATALOG NUMBER: NAV-SB1B-830-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	328.1	6.3			
FM	(30°-60°)	2127.5	41.0			
FH	(60°-80°)	1411.2	27.2			G1/1800
FVH	(80°-90°)	34.0	0.7			G1/100
BL	(0°-30°)	281.2	5.4	B1/500		
BM	(30°-60°)	658.9	12.7	B1/1000		
BH	(60°-80°)	324.9	6.3	B1/500		G1/500
BVH	(80°-90°)	26.0	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short



REPORT NUMBER: P959988

CATALOG NUMBER: NAV-SB1B-830-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	575.8	575.8	575.8	575.8	575.8	575.8	575.8	575.8	575.8	575.8	575.8
2.5°	569.8	573.1	572.3	570.9	570.6	571.2	571.9	572.8	572.6	573.9	576.0
5°	568.2	571.4	571.2	571.2	572.3	574.4	575.8	577.2	575.8	577.5	580.5
7.5°	569.3	571.7	572.8	573.9	576.7	580.8	584.0	587.0	585.4	587.3	591.1
10°	583.2	585.1	586.2	586.2	588.1	592.8	596.0	601.5	600.1	603.1	608.0
12.5°	608.5	610.5	610.5	609.4	610.7	613.8	614.8	620.8	618.4	623.3	628.2
15°	639.6	643.5	640.4	638.6	639.1	642.1	641.9	646.5	644.0	648.1	652.5
17.5°	674.0	679.0	674.0	673.7	672.6	675.9	676.2	680.3	675.9	679.0	681.9
20°	714.6	721.5	717.4	718.7	716.3	717.7	719.0	725.0	718.2	720.4	719.6
22.5°	771.9	780.1	775.7	780.9	779.3	778.2	778.0	788.5	778.0	778.8	770.8
25°	855.4	865.2	857.6	864.7	864.7	868.3	872.3	886.0	868.3	863.0	842.6
27.5°	978.7	988.5	973.5	977.8	976.5	985.2	980.9	1014.7	995.6	987.2	946.0
30°	1127.1	1144.5	1116.2	1115.1	1113.8	1127.6	1134.0	1156.3	1136.9	1128.4	1078.8
32.5°	1287.5	1305.7	1271.9	1262.1	1257.0	1265.4	1260.2	1278.2	1264.8	1251.7	1190.3
35°	1457.1	1475.2	1443.0	1423.8	1403.1	1385.4	1366.8	1371.4	1358.9	1339.1	1275.5
37.5°	1617.6	1650.6	1616.4	1596.0	1557.8	1523.1	1471.3	1449.8	1438.1	1419.7	1355.7
40°	1780.9	1799.7	1773.9	1756.3	1714.9	1660.6	1577.7	1532.2	1516.4	1498.7	1444.3
42.5°	1901.2	1919.2	1905.3	1893.3	1860.9	1797.8	1690.6	1633.6	1610.7	1590.8	1544.7
45°	1996.7	2010.0	2001.3	2005.7	1991.8	1930.7	1807.7	1742.5	1718.7	1694.4	1658.1
47.5°	2035.1	2049.3	2063.2	2089.2	2112.9	2067.8	1933.4	1860.3	1835.2	1810.4	1774.7
50°	2030.7	2045.3	2085.6	2140.7	2214.3	2199.3	2066.0	1985.7	1962.6	1934.2	1901.2
52.5°	1995.9	2012.3	2064.0	2155.7	2273.0	2297.8	2201.0	2115.3	2093.6	2059.7	2026.7
55°	1904.2	1914.1	1991.8	2121.6	2286.9	2366.5	2333.3	2253.4	2231.5	2184.4	2148.3
57.5°	1734.3	1748.4	1861.7	2029.7	2252.0	2413.2	2449.4	2398.5	2377.5	2309.5	2271.9
60°	1512.5	1535.1	1664.7	1875.3	2163.1	2413.0	2555.0	2541.2	2523.7	2432.8	2393.6
62.5°	1261.6	1287.7	1412.4	1657.1	2007.6	2344.5	2621.0	2660.6	2651.6	2546.6	2496.4
65°	968.9	986.9	1111.0	1374.7	1765.7	2197.4	2628.7	2742.2	2743.8	2633.0	2550.1
67.5°	645.1	696.9	804.6	1031.7	1441.6	1957.1	2561.6	2755.5	2771.4	2662.7	2523.1
70°	314.8	382.9	488.5	670.5	1031.7	1588.6	2386.2	2645.8	2681.1	2576.0	2362.2
72.5°	130.7	152.7	210.3	330.9	592.1	1071.9	2033.8	2348.6	2413.8	2282.6	1986.0
75°	88.1	95.4	120.3	169.6	269.8	528.6	1466.7	1751.2	1856.2	1723.9	1409.2
77.5°	68.0	72.6	87.5	118.7	160.4	200.0	785.0	1055.3	1109.7	1027.3	733.2
80°	53.5	57.0	65.5	86.5	113.8	106.9	267.6	478.2	509.5	427.4	235.6
82.5°	46.3	47.8	46.9	58.6	75.5	62.4	87.8	176.5	194.7	141.2	76.9
85°	33.5	37.4	39.1	36.3	40.1	31.7	36.0	62.4	68.8	61.4	43.4
87.5°	13.6	20.2	24.8	23.5	14.8	9.0	11.2	18.2	21.0	23.0	14.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P959988

CATALOG NUMBER: NAV-SB1B-830-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	575.8	575.8	575.8	575.8	575.8	575.8	575.8	575.8	575.8	575.8	575.8
2.5°	576.4	578.3	579.6	581.3	582.4	584.0	587.3	589.2	589.5	590.8	590.5
5°	581.6	584.2	587.3	591.6	596.6	600.6	606.9	611.3	612.9	614.3	614.0
7.5°	592.8	596.6	602.0	609.7	616.7	622.2	629.9	635.0	640.2	642.1	642.4
10°	609.4	614.8	622.7	633.1	640.7	647.8	655.7	660.1	665.3	667.5	668.6
12.5°	630.1	635.8	646.2	660.6	667.8	672.6	675.4	674.2	675.4	677.3	677.8
15°	653.8	660.1	671.8	687.4	692.3	688.0	681.9	676.5	675.7	676.2	678.1
17.5°	681.9	686.5	700.2	713.3	709.7	691.8	678.7	669.9	665.5	664.2	666.1
20°	721.2	721.2	732.4	740.6	716.9	686.3	665.8	651.7	642.7	638.8	638.1
22.5°	769.0	764.5	771.6	766.0	715.4	671.1	642.7	618.1	604.4	599.0	598.2
25°	829.5	824.3	822.4	787.0	705.6	646.8	600.6	570.9	558.9	555.9	556.5
27.5°	920.9	907.7	882.9	798.4	687.7	608.5	551.6	524.0	517.2	517.4	518.2
30°	1042.5	1016.4	955.5	800.3	658.2	554.5	501.3	481.7	478.5	479.8	484.4
32.5°	1155.2	1130.4	1029.7	791.6	612.9	501.6	456.3	443.2	438.4	439.9	442.2
35°	1243.5	1236.8	1098.5	779.3	557.3	452.0	415.9	404.8	395.2	393.1	394.7
37.5°	1327.1	1324.3	1150.0	762.1	502.1	416.8	383.6	368.8	354.9	347.3	347.5
40°	1418.7	1415.9	1183.9	735.6	453.4	386.2	354.3	335.0	317.8	303.9	305.2
42.5°	1521.8	1505.7	1200.0	697.7	411.8	360.3	330.6	304.4	281.8	269.0	269.8
45°	1634.5	1598.2	1199.7	649.4	377.0	336.6	305.2	268.1	247.1	235.1	234.6
47.5°	1753.9	1686.5	1184.9	596.0	343.2	310.4	266.0	237.6	223.7	216.3	214.6
50°	1877.2	1769.2	1159.8	534.6	308.5	280.6	241.4	222.0	211.4	204.6	202.1
52.5°	1993.1	1844.2	1129.6	465.0	273.4	251.7	230.5	215.5	204.3	196.7	193.4
55°	2100.8	1908.9	1086.7	393.9	244.7	232.4	225.3	212.8	200.0	191.0	187.4
57.5°	2196.6	1950.9	1012.8	327.1	224.2	219.0	219.9	208.1	193.4	185.7	180.8
60°	2276.3	1981.6	903.4	265.2	207.6	205.9	211.4	199.4	182.2	173.5	169.6
62.5°	2324.0	1981.1	769.3	217.1	193.4	193.9	200.2	188.5	171.1	162.9	160.4
65°	2319.9	1932.5	621.9	185.7	179.8	180.3	188.5	176.5	161.7	156.8	156.6
67.5°	2237.8	1814.2	477.0	165.3	164.7	167.2	176.7	168.3	156.0	155.5	156.3
70°	2015.5	1568.5	343.7	148.9	149.2	152.7	165.3	163.1	153.0	154.2	153.9
72.5°	1616.2	1195.9	230.7	131.7	132.0	137.8	154.4	159.0	150.1	164.5	166.7
75°	1076.4	745.8	148.4	113.5	113.8	121.2	144.8	151.1	141.9	163.9	165.3
77.5°	517.2	335.3	107.5	95.4	95.4	102.3	125.2	135.3	120.8	127.4	116.7
80°	178.7	126.0	84.6	76.9	75.2	79.9	105.6	117.3	104.2	96.0	90.0
82.5°	70.4	65.5	68.0	59.8	54.3	57.3	82.1	96.9	76.7	69.3	69.0
85°	40.4	42.5	48.0	39.6	31.4	35.2	60.3	69.6	57.8	51.0	52.1
87.5°	10.9	15.0	22.1	20.5	14.1	15.0	28.6	38.4	33.3	25.6	26.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)